

Claims

1. Method for controlling the engine of a motor vehicle having a manual transmission, characterized in that when at least one approval criterion for the engine torque (M) which is dependent on the driving state of the vehicle a default engine torque (M_v) which can be reduced relative to the setpoint (M_s) required by the position of the accelerator of the vehicle is stipulated and in that the default engine torque (M_v) is determined as a function of at least one engine characteristic (n , Q).
2. The method as claimed in claim 1, wherein the approval criterion is the driving speed (v) of the vehicle, and wherein the default engine torque (M_v) is stipulated depending on at least one engine characteristic (n , Q) when a speed threshold (v_s) for the driving speed (v) of the vehicle is not reached.
3. The method as claimed in claim 2, wherein the default engine torque (M_v) is stipulated only after recognition of a start-up process of the vehicle depending on at least one engine characteristic (n , Q).
4. The method as claimed in claim 2 or 3, wherein an additional approval criterion is a specific delay time (τ) after recognizing the process of the vehicle's starting up, and wherein the default engine torque (M_v) after a delay time (τ) elapses is stipulated depending on at least one engine characteristic (n , Q).

5. The method as claimed in one of claims 1 to 4, wherein at least the engine speed (n) and the quotient (Q) of the engine speed (n) and the driving speed (v) of the vehicle are used as engine characteristics for determining the default engine torque (M_v).
6. The method as claimed in claim 5, wherein the default engine torque (M_v) which causes speed limitation of the engine speed (n), is reduced relative to the setpoint engine torque (M_s) when the engine speed (n) exceeds a speed threshold (n_s) and the quotient (Q) of the engine speed (n) and driving speed (v) of the vehicle is within a specific value range.
7. The method as claimed in claim 6, wherein a value of 4600 rpm is stipulated as the speed threshold (n_s) for the engine speed (n).
8. The method as claimed in one of claims 1 to 7, wherein the default engine torque (M_v) is determined by applying a torque factor (MF) to the setpoint engine torque (M_s).
9. The method as claimed in claim 8, wherein the torque factor (MF) is determined from the characteristic map (1).
10. The method as claimed in one of claims 1 to 9, wherein when the default engine torque (M_v) deviates from the setpoint engine torque (M_s) an action on the throttle valve and/or the ignition and/or the fuel injection of the vehicle is initiated.
11. The method as claimed in one of claims 2 to 10, wherein a value in the range from 25 km/h to 40 km/h is stipulated as the speed threshold (v_s) for the driving speed (v) of the vehicle.

12. The method as claimed in claim 11, wherein a value of 35 km/h is stipulated as the speed threshold (v_s) for the driving speed (v) of the vehicle.
13. The method as claimed in one of claims 1 to 12, wherein the default engine torque (M_v) in idling of the vehicle is stipulated for acoustically influencing the engine noise.
14. The method as claimed in one of claims 1 to 12, wherein the default engine torque (M_v) in the process of the vehicle's starting up is stipulated for avoiding damage to the clutch of the vehicle.